

**Jamaica**

**Preparing for the Twenty-First Century**

Edited by

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Published for  
The Planning Institute of Jamaica

by



**Ian Randle Publishers**  
**Kingston, Jamaica**

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First Published in 1994

*by*

Ian Randle Publishers Limited  
206 Old Hope Road, Kingston 6, Jamaica

*for*

The Planning Institute of Jamaica

ISBN 976-8100-29-X

A catalogue record for this book is available  
from the National Library of Jamaica

Book design by David Mcleod

Cover design by Michael Gordon

Printed by DATA REPRODUCTIONS CORPORATION  
Rochester Hills, Michigan, USA.

**Preparing for the Twenty-First Century**

Papers from

**Jamaica 30 Anniversary Symposium**

**6, 7, October 1992, Kingston, Jamaica**

## **CHAPTER 2**

### **The Jamaican Economy in the Twenty-first Century: Challenges to Development and Requirements of a Response**

**Donald Harris**

#### **The Problem**

As I look back through our history, from the beginnings in slave society to the present, I see an economy characterized by an enormous potential for growth embodied in the labouring and learning and survival capacity of our people and in the richness of our natural resources. And, yet, this potential has failed to be realized in cumulative and sustained growth in the economy as a whole. Therein lies an apparent contradiction that continues to challenge our collective intellect and imagination. It also forces us to ask ourselves: in what sense, if any, have we made headway, at least in terms of economic growth, and perhaps also in terms of 'progress'.

It is not that the economy has not experienced growth in one form or another. In fact, there have been episodes of significant economic expansion in the past. Looking broadly at the historical record, I would identify four such major episodes. First, in chronological order, is the heyday of sugar and slave economy at the end of the eighteenth

century. Second is the period of rapid emergence of bananas as the leading export product in the late nineteenth century. Third is the interwar period of export boom in agricultural products leading up to the Great Depression. Fourth, and most recent, is the Golden Age of the 1950s and sixties, associated with bauxite-alumina and tourism.

But, inasmuch as these were all boom periods (at least one, in my judgement, deserves the title of Golden Age), their striking feature is that, in each and every case, as if by an inexorable logic, the momentum petered out and the economy fell back into a mode of stagnation or decline.

The growth, when it did come, has therefore been spasmodic. Moreover, it has always been highly concentrated in one or a few sectors of the economy, oftentimes at the expense of growth in other sectors. Furthermore, if output levels have selectively increased, productivity levels throughout the economy have tended to be sluggish. And, perhaps most markedly, growth of employment has failed to keep pace with the labour force, so that there has been chronic unemployment, open and disguised, of the working population throughout much of this century.

These generalisations are supported by careful and detailed study of the historical record by many scholars.<sup>1</sup> Some pieces of the evidence concerning the most recent episode are also presented here, though it is not my purpose to do more than highlight a few relevant features.

Rather, the main purpose of this paper is to suggest that there is a definite economic logic underlying this long-standing pattern of economic performance. It is the logic of a particular kind of economic process: a process that is characterized by an internal, built-in mechanism of persistent drag or *inertia*. The understanding of this process and the adoption of effective measures to counter its present-day sources of drag or inertia are necessary requirements for our ability to progress as we advance into the twenty-first century. In particular, if we want to achieve real progress, we have to find ways of breaking out of the old mould and shifting over to a different and new way of doing things. Some indications are given here, in broad outline, of the crucial requirements of an effective new way.

The task of making this transition is made doubly difficult, however, by the fact that the world we now see emerging around us is fundamentally different in important respects from the world in which we managed to experience the booms of the past. It therefore calls for us to exercise our reserves of creativity and drive and fresh, new, enterprising initiatives, as never before in our history.

This paper also has another purpose. It has been customary, among many of us, to point the finger at 'outside forces' and to claim that they are responsible for the ills that affect us. I suppose I would have to agree that in a certain specific sense that claim may have some validity, the exact sense remaining to be shown. But, the purpose of this paper is to explore a rather different approach. Specifically, I want to try to identify the levers that we ourselves control that may possibly be internal sources of our problems. This is in the belief that at some point we have to take responsibility for change in our condition and, to that end, we have to begin with those levers that we ourselves control.

### **A Case In Point: The Recent Golden Age and Its Aftermath.**

In order to break into the problematic identified above, I choose as an example the episode that is fresh in our minds and has the most readily available historical records, namely, the Golden Age that the Jamaican economy has just passed through in the last 40 years or so.

This episode is a truly remarkable and distinctive one in our history. Though the detailed comparative work going back through previous episodes has not yet been done, I would hazard the guess that it is the period of the greatest quantitative expansion in our history and of the most significant and broadly based structural transformation. If this is granted, then, it is all the more remarkable that this expansion phase, like previous ones, was followed also by a contraction phase of corresponding dimensions, involving sharp declines in production and living standards and widespread dislocation and retrenchment throughout the whole economy and society. If the expansion phase was spectacular (and it certainly was), the contraction phase was a disaster of equal proportions. It took the form, for instance, of a fall in per capita income from its peak in 1975 (which was only slightly higher than in 1972) back to a level in 1986 equal to that of 1969. Thus, one could say, it set us back at least 17 years (and the setback may turn out to be 20 years or more when the figures are all in). Remarkably, too, this latter phase was not accompanied by the deep social upheavals that occurred in previous episodes.

It could be argued, and some observers suggested at the time, that the Jamaican economy was poised for 'take-off' in the late sixties and early seventies. Certainly, it appeared that many of the relevant conditions were then in place. But, instead, it is now clear that the economy

very soon after this went into a nose-dive, with long term consequences from which the country is only now beginning to recover, and that very weakly. In the light of this performance, it seems now that the take-off theorists should be made to eat their words!

What happened to bring about this rupture, that is, to knock the economy off the Golden Age path and throw it into a tail-spin with the consequences that we observe till today?

A full answer to this question is no doubt complex, and requires systematic and detailed analysis. No one, to my knowledge, has yet developed a comprehensive analysis of the whole episode. In two earlier papers, I tried my hand at this analysis. The first (Harris, 1970) gives a detailed econometric analysis of the growth pattern prevailing during the period 1950-1966, with projections forward to 1975 that are, in retrospect, amazingly robust (up to 1973, but not after).<sup>2</sup> The second (Harris, 1990) develops a macroeconomic model as a framework for analysis of the more recent experience and presents initial results of an empirical analysis of data for the period 1969-1989. Further work remains to be done along these lines, so as to uncover thereby the deeper levels of the story.

But, meanwhile, it is possible to identify some broad patterns. For this purpose, I have assembled in the Appendix of this paper some tables and graphs summarising these patterns as they appear from the data. For analysis, I divide this historical episode into two periods: 1950-1965, for which the data and results are taken from the 1970 paper, and 1969-1989, with data and results from the 1990 paper as well as some new calculations made for the present paper.

For ease of reference, let me simply quote here the main findings from the 1990 paper (pp. 31-33):

- (a) The period of 1950 to the early 1970s was a kind of 'golden age' of growth in the Jamaican economy, as measured by all of the relevant indices of economic performance. A summary measure of this performance is represented by an average annual growth rate of GDP equal to 6.5 per cent for the whole period.
- (b) In the subsequent period up to 1989, there has been a dramatic change in economic performance. One might date the transition or turning point from, say, 1973. A sharp reversal of trend evidently occurred during 1974-1980. There was virtual stagnation during 1981-1985. The economy picked up again during 1986-1989. The entire period of 1969-1989 is marked by an absolute decline in GDP at an average annual rate of 0.24 per cent and in all the major components

- of GDP on the expenditure side, except for government consumption, exports, and imports.
  - (c) The period 1969-1989 has a number of striking features, some of which may be regarded as indicating significant change in the underlying structure of the economy. For comparative purposes, it is useful to take as a reference point the corresponding data for the 1950-1965 period.
  - (d) The most obvious and commonly noted feature of the 1969-1989 period is the sharp increase in the role of foreign indebtedness. This change has converted the economy into what one might properly call a 'debt-propelled economy'.
  - (e) Along with the increase in foreign indebtedness has come a significant decrease in the role of net direct investment from abroad.
  - (f) But what is equally, if not more, striking is that these changes have been accompanied by a transformation in the relations of consumption, saving, and investment as well as the role of exports in the Jamaican economy.
  - (g) Net saving declined from an average of 11 percent of national income in the earlier period to 7 per cent in the later period. The saving ratio actually turned negative in 1976-1977, 1981-1982, and 1985. Most of the dissaving occurred in the government and household sectors.
  - (h) Gross fixed capital formation as a proportion of GDP was on average higher in the later period, but the level of gross investment declined during this period at an annual average rate of 1.45 per cent.
  - (i) The share of private consumption in GDP fell from 75 to 65 per cent. The share of government consumption rose from 10 to 17 per cent.
  - (j) There is a definite inverse relation between government consumption and gross investment in the later period.
  - (k) Both exports and imports have risen as a share of GDP, indicating that the economy has become more 'open' in this sense. Estimated income and price elasticities of export demand are both low, respectively 0.52 and -0.34. Import demand has high income elasticity of 1.11 and low price elasticity of -0.29. These elasticity estimates cast doubt on the stability of the balance of payments adjustment mechanism.
  - (l) In the earlier period, export growth was highly and positively correlated with growth of GDP (with correlation coefficient of 0.96). In the later period, the correlation of exports and GDP is low and negative at -0.26.
  - (m) The wage share rose markedly during 1969-1977 and has been declining ever since.
- All of these trends and changes, taken individually, are quite remarkable and dramatic. Taken together, they constitute the central

elements of the problematic requiring to be analysed in order to understand the recent history of the Jamaican economy and the prospects for the future.

For present purposes, I wish to focus only on a few key points that are relevant to the argument of this paper. The first concerns the substantial decline in the export growth rate from an average annual rate of 9.3 per cent in 1950-1965 to 2.39 per cent in 1969-1989. Insofar as exports constitute a major driving force in the growth of the economy, this decline could be considered a significant factor in the downturn. But, even so, it is not sufficient to explain what happened. This is because the actual export growth rate in the later period was a positive and quite respectable 2.39 per cent per annum while, on the other hand, GDP declined at an average rate of -0.24 per cent during the same period. This indicates that something must have happened to break the strong positive correlation between exports and GDP established in the previous period. It means, certainly, that the mechanisms which would normally transmit the impetus from growth of exports to expansion of GDP were not at work in this period. Therefore, factors other than the decline in export growth must be introduced to explain this striking structural discontinuity. This is a key finding of this research. It also helps to reveal the crucial role of internal factors.

There was also a significant decline in the level of investment during the later period, in part attributable to reductions in the level of net foreign direct investment. Again, this may help to explain the downturn, but only partially. For, though foreign direct investment declined, there were large capital inflows in the form of official loans and grants from multilateral and bilateral sources during 1975-1985. It is also notable that during the 1969-1989 period the average share of investment in GDP was higher compared with the earlier period 1950-1965.

What is of crucial significance is that, in this context of decreased growth of exports and decline in foreign direct investment, there was a sharp rise in the level of government consumption, sharp enough to push up its share of GDP from 10 per cent in the earlier period to 17 per cent on average in the later period, reaching a high of 20-22 per cent during all the years 1976-1983. This increase in consumption was certainly at the expense of public investment, and must also have helped to induce cutbacks in private investment to the extent that the latter is led by the former.

As to the level of private consumption (excluding transfer payments), that actually fell at an average rate of -0.22 per cent over the later period and its average share fell from 75 to 65.3 per cent between the two periods. But, like government consumption, the share of private consumption also rose significantly within the later period, from a low of about 60 per cent in 1970 to a high of near 70 per cent in 1981-1985.

To complete this picture one would have to take account of the actual composition of saving and investment in the later period. For this, relevant quantitative data are not readily available, but the evidence suggests that much of the activity underlying the numbers in this area took the form of the flight of capital out of the country and an internal shift to investment and speculation in real estate.

There is an evident question here of how one explains the causal factors at work in this situation. In this connection, there has been a notable tendency in existing discussions to point to the role of 'external causes'. The decreased growth rate of exports and fall in foreign investment would presumably be put in this category. However, this idea itself begs another question, namely, to what extent were those supposed 'external' factors strictly autonomous and independent or, instead, induced by *internal* developments within the economy? This would require more detailed study. But even if those factors are shown to be autonomous, independent, and significant (and there is no gainsaying that they were to some extent), that result would simply beg a further question, namely: *Why did internal factors not respond to compensate, at least in part, for adverse external circumstances?* I consider this to be a key issue that has to be faced.

As regards this particular issue, what this analysis shows is that there were *internal* causal factors at work as well. Primary among these was the collapse of saving and investment in the government and household sectors. The other side of this collapse is what can fairly be called a *consumption binge*, taking the form of the observed sharp increase in the share of consumption in GDP by both the government and private sector. Evidently, the increased consumption was financed by foreign borrowing to a large extent, and by dissaving. The consequence of this, in turn, has been to create a heavy overhang of debt payments that continues to plague the economy and to hamper possibilities of a recovery.

The private sector also played its part in this process in ways that contributed to the collapse of saving and investment. For instance, it is evident that many of the actors in this sector simply 'ran for cover',

so to speak, seeking safe shelters for their saving and capital, and that served to drain away the potential for productive investment.

It does not help matters to say that this consumption binge was necessary in order to maintain the standard of living of the poor. On the contrary, from close examination of the actual tax and expenditure flows involved, the evidence shows that, at least in part, the increased consumption took place *at the expense of the poor*, because of redistributive effects across different income groups.<sup>3</sup>

Besides, even if one discounts the magnitude of these redistributive effects, there is still the key issue of the intertemporal tradeoff involved, which cannot be ignored. It arises from the fact that the consumption binge of today imposes a necessity to cut back consumption tomorrow as a cost on tomorrow's consumers. Since the cost cumulates over time, it may turn out to be quite high.<sup>4</sup>

I have tried to examine this issue analytically by performing the following simple exercise. Take the actual level of per capita consumption in 1970 as the starting point. Assume that, from 1970 on, consumption grows at the observed average growth rate of exports equal to 2.39 per cent per annum for the period 1969-1989. This assumption is equivalent to supposing a steady state process with exports as the driving force. Call the time path of per capita consumption generated in this way the path of 'potential consumption'. It is the path of consumption that would be sustainable if the normal structural relations that feed back from the growth of exports to the growth of consumption continued to hold. Now, compare this path with the actual path of per capita consumption, and compute the ratio of the two. The result is shown in Table 7 and in Figure 1.

It turns out from this exercise that the actual path rises above the potential path for a while, from 1971 to 1976, by an average of about 6 per cent per annum. But after 1976 there is a precipitous fall of the actual below the potential path, down to a ratio of the two of 63 per cent in 1987 when the process runs out of data.

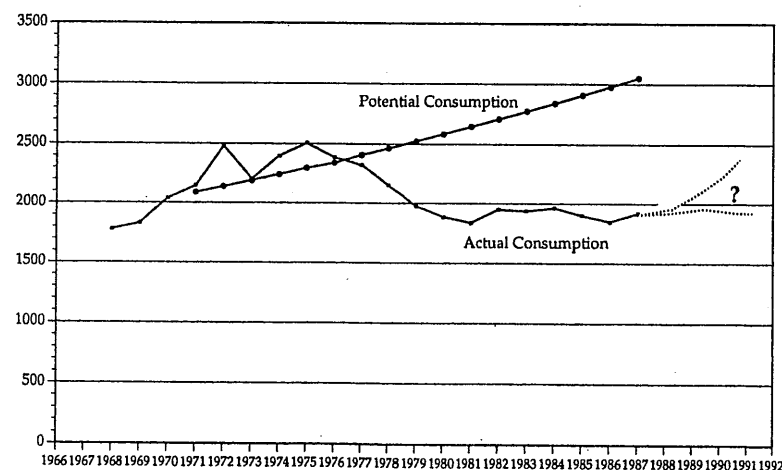
Thus, in this exercise, the intertemporal tradeoff is between (a) a temporary gain in consumption of 6 per cent per annum for six years and (b) recurrent losses thereafter growing to 37 per cent in the last year of the recorded accounts. This last year might only be the bottom of a process that perhaps continues indefinitely or, at best, until actual consumption rises sufficiently to catch up with potential consumption in the distant future. I am not able to compute the implicit rate of return involved in this tradeoff because of its open-endedness in time (and the catch-up, if it ever comes, may take a long time in coming).

Table 7

PER CAPITA CONSUMPTION, ACTUAL AND POTENTIAL  
(1980 \$)

YEAR	PER CAPITA CONSUMPTION		RATIO OF ACTUAL/POTENTIAL
	ACTUAL	POTENTIAL	
1968	1,777.8	..	..
1969	1,828.5	..	..
1970	2,041.7	2,041.7	1.00
1971	2,149.3	2,090.5	1.03
1972	2,480.4	2,140.5	1.16
1973	2,204.6	2,191.6	1.01
1974	2,399.0	2,244.0	1.07
1975	2,504.6	2,297.6	1.09
1976	2,387.1	2,352.5	1.02
1977	2,324.9	2,408.8	.97
1978	2,154.4	2,466.3	.87
1979	1,978.6	2,525.3	.78
1980	1,887.7	2,585.6	.73
1981	1,837.5	2,647.4	.69
1982	1,951.5	2,710.7	.72
1983	1,938.2	2,775.5	.70
1984	1,965.6	2,841.8	.69
1985	1,902.2	2,909.7	.65
1986	1,848.1	2,979.3	.62
1987	1,919.7	3,050.5	.63
1988	..	..	..
1989	..	..	..

Figure 1. Time Paths of Actual and Potential Consumption per Capita (in 1980 \$)



But it seems obvious that it is highly negative and, hence, this should be considered a disastrously unprofitable transaction by any standard. Clearly, it would have turned out much better if, for instance, the funds that financed the initial gain in consumption had simply been deposited in a pass-book account in the savings bank! This alternative, even at the terribly low rates then actually prevailing on pass-book accounts, would certainly have sustained an indefinitely continuing stream of extra consumption.

There are some who would view this overall economic performance as a disaster of public mismanagement and private disarray. Others would say it was an inevitable consequence of external shocks. There may be something to the arguments on both sides, and the truth perhaps lies somewhere in the middle. But I believe it would serve no useful purpose at this stage to engage in pointing the finger and allocating blame. The proper goal must be to learn the appropriate lessons from this experience and find constructive ways forward.

It is in this spirit that I turn now to try to develop a constructive analytical perspective on the problem. The aim is to make some sense and gain some deeper understanding of where we have been in our history and where we are now, so that we can, hopefully, better determine where we ought to be going in the future.

### Model of an Economic Process with Inertia

It will help to fix ideas and sharpen our perception of reality if we think in terms of a simple, abstract, analytical model. To this end, consider the process schematically described in Figure 2. It begins with the entry of inputs into the process. These inputs are identified as finance, investment, and technology. As an economic process, these can be readily recognised to be key ingredients for starting up the process and keeping it going. Another such ingredient, of course, is labour, but that is assumed to be readily available without limit. Lying in the background, also, are natural resources ready to be used. It is an essential characteristic of the process that the inputs, other than labour and resources, enter from outside the process or, so to speak, 'from abroad', supplied by external agents.

The inputs pass into a production phase where they are transformed into products. The production phase is a fully specified box of given and known dimensions, and unchangeable except to the extent

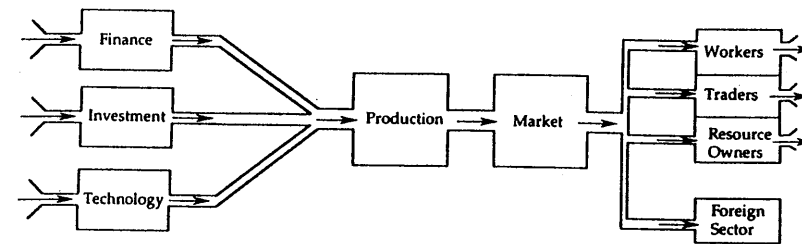


Figure 2. An Open System with Inertia

that the input suppliers or others in charge care to change it. But the suppliers, being external, and basing their economic calculations on a larger circuit, may have no incentive to introduce change. Others may, for their own reasons, be indifferent.

The products, in turn, pass into a market phase where they are sold. Like production, the market is a fully specified box, known and unchangeable except by external factors. It is simply there, sheltered and fully protected, as a guaranteed outlet for the products.

Finally, sale of the products yields revenues from which various groups draw incomes. Some of these groups, namely, workers, traders, and resource owners, are an internal part of the process. Another sizeable group, the foreign sector, consists in part of the input suppliers, but may also consist of an external state to which tribute is paid by requirement of a 'colonial rule'.

It is also an essential characteristic of this process that it terminates in the phase of withdrawal of revenues and, thus, is 'open' at its end point, as at its starting point. Some groups may grow rich from the amounts of revenue which they withdraw. Others remain poor. The openness in this phase is associated with leakages from the process. One such leakage is that part of the revenues goes directly to the foreign sector. Another part also leaks out because of the behavioural propensities of the different internal groups, namely, (a) their high propensity to consume, (b) their high propensity to spend on imported objects of consumption, (c) their preference for investment and speculation in real estate, and (d) their tendency to shelter their income and capital by shipping it abroad.

Considered as a whole, then, the essential and defining feature of this process is that there is no organic linkage that binds together the withdrawal of the revenues at the end of the process and the inflow of inputs at the start. In this respect, *it is a process without feedback.*



To the extent that this organic linkage is missing, the process as a whole cannot therefore be self-sustaining. Moreover, to the extent that there are significant leakages from it, the process must necessarily tend to stagnation operating by itself. If there is growth, it must come from the continued inflow of inputs from outside. But since that inflow, governed as it is by external factors, is necessarily intermittent and discontinuous, the growth itself must also operate by fits and starts.

I call this *an economic process with inertia*, where the sources of inertia (at least some of them) are visibly internal to the process. These internal sources are many, some more obvious than others. The more obvious ones I have already mentioned. They come from the behaviour pattern of the different social groups, in terms of the way they dispose of their revenues in each case. But the sources also show up in the spheres of production and marketing of products, in terms of the decision making structures affecting the process all along the line beginning with the external structures that start the process. And, as we have already seen from the concrete case studied in the previous section, the sources may also include specific policies and actions of the government.

It is important to note that this process is not inconsistent with change. In fact, we could write a history of this process showing marked structural changes. For instance, these could take the form of the unfolding of new production sectors (new products) and relative decline of old sectors (old products). Given the logic of the process, such changes would have to be seen, in large part, as results of the intermittent stimulus produced from outside.

The mechanism by which such changes work themselves through the process is interesting in and of itself, as well as for what it tells us about the possibilities for the emergence of new social groups (as new centers of decision making) conditional on these changes. A fundamental question would be: to what extent, if at all, are these new groups able and willing to act to change the basic form of the process.

Without going into these matters in detail, let me simply sketch the following dynamic of change. Structural change would take the form initially of a *primary stimulus* produced by the introduction of a new product (sector), say, sugar, bananas, bauxite, alumina, tourism. This would be followed by a *secondary wave* derived from the *spillover effects* produced by the primary stimulus on other sectors. These 'spillovers' would be both negative and positive, the net effect depending on the special conditions of each case. Another kind of secondary wave would arise from intermittent booms and declines in old products,

depending on the state of the external market. The primary stimulus and secondary wave together will have the effect of stimulating expansion of the domestic market. This, in turn, creates room for the emergence of new forms of domestic production, say, in manufacturing, construction, and services, as well as new social groups associated with them. But it must be emphasized that this is essentially a *derivative effect*. That is to say, it is derived from the primary stimulus and secondary wave as a passive form of adjustment to those stimuli, and does not in itself represent a transformation in the basic process. It could, however, represent the seeds of such a transformation if and when the emerging centres of economic power begin to exercise appropriate entrepreneurial initiatives on their own.

This process is also not inconsistent with change in the *political* sphere. In fact, we could write a corresponding political history showing changes in the form of government, leading up through universal adult suffrage, constitutional self-government and, finally, to political independence. These developments would be associated with a growing share of government in economic activity, becoming in the last phase highly significant in quantitative terms. Here, again, as in the economic sphere, a fundamental question would be: to what extent, if at all, is the government able and willing to transform the basic dynamic of this process. It is possible that the government could act, in its own way, to strengthen the hold of the process by contributing significantly to the sources of inertia.

Perhaps the practical relevance of this history to the specific circumstances of Jamaica may become more transparent if we attach names and dates to these changes and the particular events associated with them. I leave those details to the historians as they are better experts at this. But, for illustration, I refer to Figure 3 where some of the main contours of the actual history can be traced out schematically. In particular, the diagram suggests that each phase of this history is

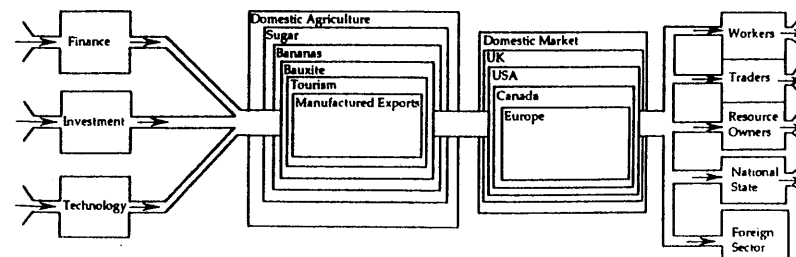


Figure 3 History of an Open System with Inertia

associated with the introduction of a new production sector, each forming an incremental layer in the production box and subsequently pursuing a life-cycle of its own. In the market box, these transitions are accompanied by differentiation of market outlets and, in the political sphere, by emergence of the national state.

The key point that this diagram emphasises is that all of these historical transitions take place within the context of an ongoing economic process, but without the economic process itself becoming transformed. That economic process, intrinsically characterised by inertia, remains essentially intact.

We would have to conclude from this history, then, that this process has a high degree of durability and that, indeed, it is deeply entrenched in the workings of the society. It is therefore to be expected that, whatever the momentum gained in each period of transition, that momentum would be, to a considerable extent, dissipated.

This is certainly the prediction that falls out of the model of the economic process that I have presented here. And, as we have seen, that prediction is confirmed in the case of the most recent episode of a Golden Age. The evidence for this is presented in the previous section.

It would also be interesting and useful to examine the actual workings of this process by going back to earlier historical episodes. But that task is much beyond my present scope. It is work that certainly deserves to be done and I leave it to others to do it.

### **Model of an Endogenous Process of Cumulative Growth**

Now, let me go on to consider how, if at all, it is possible to alter this process and its intrinsic dynamic of persistent inertia. This is the problem that must be addressed if we are interested in improving the performance of the economy in terms of its capacity to sustain the momentum of growth.

Thinking of it simply as a process with leakages, one might be tempted to say that the answer is perfectly simple and straightforward: why not just stop the leaks? However, upon further thought, it turns out that the matter is not quite so simple. This is for the following reasons.

First of all, it would require some further analysis and experiment to determine the most effective ways of stopping the leaks. Since there

is some history to go on, it may be possible to rule out some ways as having proved themselves in practice to be useless. But there may be many other alternatives that, for one reason or another, have not yet been tried.

Second, it is not 'just' a matter of leaks, but also of decisions affecting the whole process from start to finish, specifically in terms of finance, investment, technology, production, markets, and distribution. So, the overall scope of the problem is quite large.

Third, there is the deeper problem that the existing leaks and decisions governing the process may be the result of learned and adaptive patterns of behaviour that are a 'rational' and conditioned response to the incentives and disincentives produced historically by the prevailing socio-economic and political environment. In that case, change is inconceivable without altering the structure of incentives, without some 'unlearning' by those who have already adapted, and/or without waiting upon the emergence of a new generation that has learned in a different environment.

Finally, there is the problem of 'agency', namely: Who or what group is to act to implement and carry forward the changes once they have been decided upon and compatible structures designed? And, what are the strategic mechanisms of control that these actors have for performing this task?

For all of these reasons, and more, we have to recognize from the start that we are dealing here with a rather complex problem that is not capable of being solved by any simple and readily available formula. Moreover, there is the fact of history itself, which does make a difference, certainly in terms of what solutions might be workable in the particular 'initial conditions' that history imposes.

Yet it is possible, if we try, to make some headway towards an operational solution. As a contribution to that effort I have some ideas that I now wish to present. These ideas may appear, at first sight, quite complex and abstract. But I am confident that they have very concrete and practical implications, as I show in the next sections. Moreover, if we do get down to work out their implications, we might even come to accept that they are worth pursuing in practice.

Thinking of the problem abstractly in the first instance, in terms of the model presented in the previous section, it seems sharply clear what the overall objective must be. Specifically, the objective must be the following: *to close the loop of the economic process by building in feedback mechanisms and organic linkages, and thereby endogenizing the process of growth.*

This degree of clarity of the objective must in itself be regarded as a step forward. As an aside, note also that this objective, as stated, may on the surface evoke familiar sounds from slogans of the past, like 'self-sufficiency', 'indigenous development,' 'producing basic goods for basic needs', 'getting rid of dependency', among others. I want to warn the reader that the idea involved here is fundamentally different. The differences will become more transparent as I go along.

Once the overall objective is clearly defined, it becomes, next, a matter of identifying the appropriate feedback mechanisms and organic linkages necessary to close the loop. Here, I wish to propose that there are two essential components of an effective strategy for closing the loop and, then, go on to consider each of them in turn. For short, I call them: (1) the incentive system, (2) entrepreneurship.

It will help to show, first of all, how they fit as distinct elements in the conception of the overall economic process. This is shown schematically in Figure 4.

It can be seen immediately from Figure 4 that, once these components are in place and working effectively, we have an entirely different process from that of the first model. The essential difference is that this process has a built-in capacity for maintaining its momentum because there exists a regular and recurrent feedback of energy into the process. That feedback exists because, first, the various social groups are induced to engage in it, each in its own way, by the appropriate system of incentives, represented in Figure 4 by the column on the right. Second, it exists because there is a network of active decision making units, represented by the column on the left, capable of exercising a special quality of entrepreneurship that systematically channels the energy fed back into the process into specific activities, namely, finance, investment, and technology. These are the activities which, as we have seen in the first model, constitute the necessary inputs into production. But in the case of this process, the difference is that these activities are guided and directed by agents having a definite place as an integral part of the process and having, as well, the capacity and drive to restructure and enhance the process in all of its phases of production, marketing, and distribution.

I call this process, when it is duly constituted as such, *an endogenous process of cumulative growth*. The model of this process serves two didactic purposes. The first, the negative and backward-looking purpose, is that in comparison with the previous model this model tells us what is missing from the previous process that makes it a process with inertia. The second, the positive and forward-looking purpose, is that it tells

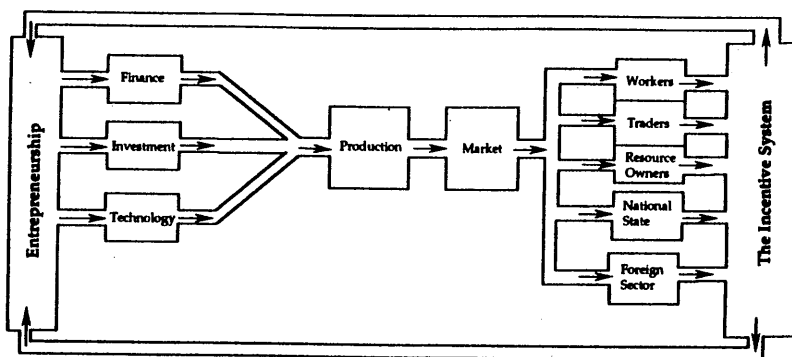


Figure 4. A Closed-Loop System with Cumulative Growth

us what are the specific elements that have to be instituted in the economy, as a matter of priority, if it is to change over to a process of cumulative growth. The model serves thereby to help us get the priorities right.

This is, of course, only a 'model', which is to say that it necessarily has a certain abstract and idealized character. That character is strictly necessary to give it usefulness for didactic purposes. But even so, if the model is to have operational value, there remains an important question of how to give a concrete and practical meaning to its elements. In this regard, what needs to be considered here are the two key elements: the incentive system and entrepreneurship. In the following sections, I try to give them concrete substance and bring out their practical meaning.

## The Incentive System

The incentive system is one of the most profoundly important, and yet commonly misunderstood elements of the economic process. Psychologists, educational experts, industrial sociologists, and other behavioural social scientists, as well as shop-floor supervisors in manufacturing plants have for some time understood its unique significance. But, sad to say, economists are only now catching on to the problem (see, for instance, the new 'incentive compatibility theory'). The break up of the East European systems is also forcing us to recognise the importance of this element, not only for 'those' systems (which never quite managed to get it right), but for 'ours' as well which are far from being perfect in this respect.

Thinking of it in purely economic terms, many of us here in Jamaica would probably immediately associate the idea of an incentive system with the old investment-incentives law, which is indeed one relevant form of such a system. This form was mostly aimed at attracting foreign investors using as a model the example of FOMENTO in Puerto Rico. That programme has long been derisively dismissed by many of our economists as 'industrialization by invitation' because of its documented failures in our own context. I do not wish to go over the arguments that have already been made, pro and con. They are part of the history from which we have to learn for the future. But even if we can point to the failure of one set of incentives, that provides no reason whatever for us to dismiss or ignore the need for an incentive system as such, one that would not only relate to the foreign investor but also to local investors as well, and to other national groups, including workers, traders, resource owners, and state bureaucrats.

Now, considering first the matter of investment incentives, it seems to me that, as a set of investment incentives, the old system was bound to yield poor results. This is because, among other reasons, it was essentially based on what I would call the 'fishing net approach' (or, if you wish, the 'shotgun approach'); that is, cast your net widely enough and hope that some fish will be caught! With this approach, some of the fish you catch will undoubtedly turn out to be bad fish. But what if one went about it in a more systematic way, carefully selecting and targeting the prey, stalking him, and taking special measures and steps to make sure that he is caught?

This metaphor is intended to be taken seriously. What we learn from the earlier experience is, not that investment incentives sometimes do not work or produce a mix of good and bad results (that, after all, seems fairly obvious), but that to get meaningful and constructive results (a) the correct incentives must be designed and (b) they must form an integral part of a strategy of investment targeting. Such a strategy has long been successfully practiced in many of the Asian Newly Industrializing Countries (NIC) (South Korea, Taiwan, Hong Kong, Singapore) and elsewhere (India, Turkey), and much earlier in Japan. One element of that success is clearly the incentive system that was designed to go with the overall strategy. I propose that the experience of those countries in this area deserves our careful study.<sup>5</sup>

So far as specific targets of such an investment strategy are concerned, there are many reasons to suppose, and I wish to propose also, that Jamaica could develop a strong competitive advantage in a number of areas, some existing, some new. Among these, let me simply

suggest the following list (based on my own preliminary effort at researching the problem):

- (1) as an international financial center, catering to the needs of the wider Caribbean market and to the North American market as well (for instance, by linking up initially with immigrant communities there);
- (2) in manufacturing industry: textiles, household gadgets and equipment, chemicals for household use, small machinery and machine parts, tools;
- (3) in agro-industry: horticulture, scientific stock-breeding, all using modern advances in bio-technology;
- (4) in the application of computer-systems software and control devices to service local production in all sectors including the government (and possibly export), for upgrading existing production techniques and meeting the needs of new industry.

All of the items on this list could serve well the goal of export diversification which is a necessary basis, not only for preserving the momentum of economic growth, but also for building into the economy resilience and resistance to external shocks. I need not go into the specifics of each case here. But the case can be made. Give me a team of technical experts and, together, we could make the most marvelous case. Others may have a similar or competing list, and a case too for their list. The difficulty is not in compiling the list or in making the case, but in implementing the strategy and keeping it going once it has been agreed upon. Here is where the issue of an appropriate system of incentives consistent with and coordinated with an overall strategy of investment targeting comes in.

But, quite apart from investment incentives as such, the consideration of an incentive system has to be extended to include, in an integrated manner, incentive structures affecting all national groups across the board: not only the 'economic groups' of workers, traders, resource owners, and entrepreneurs, in their capacity both as producers and consumers, but also state bureaucrats, and the so-called 'social sectors' (teachers, health workers, *et al*). Even environmentalists have to be brought on the bandwagon. The obviously wide range of interests involved among these different groups should give us a sense of the complexity of the problem we are dealing with here. It is further complicated once we recognise that not all incentives are economic. But this complexity should not cause us to shrink from dealing with it.

There is another side to the incentive system that cannot be ignored, namely, it can also be a system of *disincentives*. The burgeoning

literature on the economics of planning systems in Eastern Europe has shown us sharply the perverse features of this other side (e.g. 'soft budget constraints', 'false signalling', 'queuing,' etc.).<sup>6</sup> These disincentives can wreak havoc at the level of the factory, the farm, the consumer, and within the state bureaucracy at the highest levels. There is much that we could learn from studying that literature, insofar as it is relevant to our own conditions, for instance, to the functioning of our government bureaucracy and some of our private firms.

But we should also see that there is a positive and necessary role for disincentives. In this role they are really to be considered *penalties*. In the context of the business firm, bankruptcy is clearly one such penalty. Here, the firm is penalized for poor performance. In general, we cannot afford to tolerate poor performance. There must be built-in penalties that are explicit, clearly stated, and even-handedly applied. Examples of these penalties are: losing out on the bid for the contract, getting the line of credit cut off, missing the next pay raise, losing one's place in line for promotion, and so on. Here again a list can be drawn up of rules and laws in this case, but it would have to be done with the active involvement of all participants to ensure acceptance and compliance.

The system of penalties would also be far more effective if there are *rewards* built into it. Just as much as we cannot tolerate poor performance, good performance must be adequately rewarded. A pat on the back is sometimes all that is needed, but in most instances that is not enough and, if that is all there is, the really sharp people will begin to see through it and dismiss it as paternalism. The rewards must be ample and proportionate to the achievement. This means that we have to come to accept *inequality of rewards*. Equally, we cannot continue to reward mediocrity and incompetence.

I have to add to all of this another aspect of the incentive/disincentive system that we know very well from our own experience. This is the distortionary effect that an existing set of powerful incentives can produce on the overall structure of incentives, acting like a kind of 'Dutch disease' to weaken and perhaps nullify the other incentives. To give it a local name, I call it the 'ganja disease'. In Jamaica, this particular disease takes the form of a large part of a whole youthful generation of bright, energetic, and highly motivated people being drawn into the ganja industry by the incentive of quick and large gains to be made from growing and selling and providing security for this product. They, thereby, become lost to the possibility of pursuing other, more constructive, socially productive, stable, long term, oppor-

tunities. Others not directly or indirectly involved in that industry are themselves distracted by the large gains and fancy lifestyles they perceive in it, from seeing the prospects for a lower but safe and steady rate of return from alternative investments in existing or new lines of production. I suspect that the far-reaching economic consequences of this disease, especially in the sphere of economic incentives for agricultural production and, more generally, in the expectations-vs.-reality syndrome of a wide cross-section of our people, may still be with us.

Finally, we have to face the difficult problem of the appropriate incentives, economic and noneconomic, for getting a constant stream of innovation and new ideas, not only in the university and laboratories, but also in the top levels of public administration, in the control centres of the corporation, and in the workplace.

One of the best forms of incentive is freedom of entry and of access to the top. This proposition holds generally for industries, markets, business firms, bureaucracies, and other social institutions. But barriers to entry, such as custom and tradition, social privilege and prejudice, may get in the way of this incentive and prevent it from working. The tendency to hang on to 'status', aggravated in small societies by the absence of lateral mobility, may also help to block it. And in a class and race-conscious society, with a history of slavery, these barriers abound. They serve to inhibit the exercise of talent and initiative. At worst, they cause some of the most talented and motivated among us to move to more hospitable environments abroad where they can and do flourish, so that the country thereby loses some of 'the brightest and the best' while the status seekers continue to vegetate in their status positions. We cannot miss the opportunity to remove these barriers wherever they are to be found.

Broadly speaking, the problem of incentives requires finding a way to energise people to act in a manner wholly consistent with their own individually perceived needs and goals (in this sense, 'rationally'), so that their actions may also correspond to particular and commonly accepted social goals and needs. A solution to that problem does not presume that we have to go about trying to change people's perception of their own needs and goals. If that change does occur, and in the right directions, it would be a bonus. But who is to do it and how is it to be done? It is simpler, at least in the short run, to work on the incentive system. As I have argued here, this problem should not be posed too narrowly; it is complex and profoundly important. A solution should be a key element in the strategy that we adopt for dealing with the next century.

I do not consider here the related question of resource constraints. This is not because it is not important, but because I think it is strictly subsidiary to the question of incentives.

## Entrepreneurship

Consider next the element of entrepreneurship. In seeking to concretise this element it is necessary to get away from old fashioned concepts and outmoded thinking that are the source of much confusion on the matter and an obstacle to moving forward.

The old idea is that entrepreneurship is a personal and innate quality of the individual as entrepreneur. There is perhaps something to this idea, insofar as we do know that there are many successful individuals whom we can point to as having this quality. There are many books and even scholarly journals dedicated to celebrating the lives and exploits of the most rich and famous of them. As some would say: 'You know one when you see one, and that's enough'.

If there is something to this idea, and to the degree that there is, then what I am about to say could be interpreted to mean that what we need in Jamaica is a new breed of entrepreneur different from the ones that we are accustomed to see and know here. However, to me, that interpretation would not be enough and, in any case, would amount to trivializing the problem. For instance, it may be possible, and some have argued, that the old breed (the so-called merchant capitalists) could be induced to change their ways by a change in the incentive structure that they face. There is no certainty of this result in my view, and the experiences of history here and elsewhere may be against it. There is perhaps greater hope for their children, and some of them do appear to be able to carry the ball. But, whatever one views as the likely outcome, this argument does point us usefully and constructively to consider the role of incentives in influencing economic behaviour and, hence, what changes in the incentives might produce better results.

I propose that what we need is not just any entrepreneur of common or garden variety, new breed or old, but entrepreneurs possessed with very special qualities. Moreover, and equally important if not more so, what we need is a structure of relations and interconnections among such entrepreneurs that makes them more effective as entrepreneurs.

The nature of these special qualities I shall come to in a moment. But a brief word on the need for such a structure seems appropriate before we get further into it. Specifically, the need for this structure can be shown straightforwardly on the basis of elementary economics (or business) principles and knowledge of one of the qualities that we are looking for. In particular, one of the qualities that we would all agree to be necessary is surely the capacity for long range planning of productive investment — a capacity that would enable 'sticking-to-it' instead of running for cover when the going gets rough or settling for quick profits. To develop this long range planning, it would seem necessary to have a structured framework in which individual entrepreneurs can take decisions and act, knowing that the actions of others will be consistent and predictable, and that they can thereby minimise the risks involved. Here is a role for a structure, not just of relations among the entrepreneurs, but including the state as well.

If it is also accepted that we have to pursue a long term strategy of 'investment targeting' worked out among the entrepreneurs and the state, as discussed above, then the existence of some such structure would be a necessary precondition to get this strategy to work effectively. The problem of course is to design the right structure and, for this, there is no simple formula. But, as I shall show in a moment, there are many models available from which we could learn.

Now, the way to cut through the fog on this issue is to break down by analysis the activity of the entrepreneur within the specific environment in which he or she acts and to try to discover, thereby, the essential character of the actions involved and the attributes that they entail. When that is done, it will be found, to put it simply, generally, and briefly, that: entrepreneurship is a set of particular organizational capabilities and skills for doing things in a team, where the size of the team may be large or small depending on identifiable factors such as the nature of the task (or undertaking or enterprise) to be done and the environment in which it is done.

This is the analytical conception now being developed by scholars who have carefully studied the matter. They are typically in the business schools and not too many in economics. There is a great deal that we can all learn from the results of their studies.<sup>7</sup>

For present purposes, I would need to specify further this conception by adding that: entrepreneurship is the capacity to coordinate finance, investment, and technology, for carrying out production and marketing of products, while also bearing the risks involved in so doing.

This conception is general enough to encompass the old idea of a one-man (the 'great man') operation, because that is simply the special case of a team of one. But it is more general because it focuses on the team rather than on the man. Such teams exist in all capitalist countries at the 'executive level' of firms where each such firm has a certain legal and institutional identity based on property rights. The team may be large or small in size, ranging from the large conglomerate and the joint-stock company, to the limited liability partnership, to the one-man operation inventing gadgets in the basement of his house.

By broadening our view of capitalism from the rather narrow one that takes as its paradigm the special case of the US, it becomes possible to see that the team as a unit of entrepreneurship may extend far beyond the individual enterprise, firm, or conglomerate, and across industries and sectors of the economy, to become a network of teams. Call this network the *Group*. And, what is even more striking, when we look at the evidence, is that the Group may incorporate the state in intimate and integral ways, formal and informal, constituting what we may call a partnership between the state and private sector.

Such Groups exist in many countries. They are typically found in Asia, so much so that we could think of them as 'the Asian Model'. But they are also found elsewhere closer to home, as in Mexico for instance, where they are in fact referred to as 'los grupos' (e.g. el grupo Monterrey). The particular form of the Group would vary somewhat from one country to another, the difference being marked by the specific role that the state plays in each.

To bring the matter even closer to home, the interesting fact, commonly recognised but not well understood, is that such Groups exist in Jamaica too, and have done so for a long time. They have developed historically within closely knit family units. They have also, certainly, not lacked close ties with the Jamaican state. I propose that we should now be searching for practical ways of extending that system outward beyond the family by allowing new entrepreneurial entrants and installing it on better modern institutional foundations as part of a new network of entrepreneurship based on a new partnership between the state and private sector. Continued extension and deepening of the capital market, for both stocks and new issues, are important steps in this direction, and there are other measures we should be considering.

In more general terms, my proposal is that we should be searching for a new model of entrepreneurship, starting with what we already

have, and looking far and wide to find the best model suited to our own conditions.

Looking farther afield, we can identify another relevant model which moves towards the pole opposite to the Asian Model. The paradigm case of this is the French Model of Indicative Planning. It is a looser system of linkages between the state and private sector in which, to simplify a bit, the state sets the national targets for production and investment, exhorts the private sector firms to go along with the targets, and meets regularly with them to monitor how well they are doing.

Another case altogether is the Scandinavian Model, with its welfare state features and strong trade unions playing a much greater role than in the other models. But that model, it seems, is now beginning to fall apart.

Then, there is of course the American model which, for many, is the paradigm case of a 'free market economy'. What needs to be recognised is that this model is farthest out at the opposite pole. Even so, to understand that model correctly, it is necessary to distinguish between the ideology of it and the reality of it. For instance, it is clear from closer examination that in such industries as aerospace, electronics; and biotechnology, which are on the leading edge of modern technology and international competition, the government of the US, at all levels — federal, state and local — exercises a high degree of state intervention. The same is true, perhaps more so, of agriculture where, historically, private firms and government have worked hand in hand in all areas, from prices, subsidies, and export strategy to technology, irrigation, finance, education, and land grants. There is also evidence that the US may now be moving more and more away from the pole that the ideology presupposes, and may have to do so simply as a necessary requirement of being able to keep up with the increasing competition from economies at or near the other pole.

The 'Puerto Rican Model' is another special case which, in the past, we in Jamaica have tried to copy, failing to see that it is indeed a very special case not replicable under different conditions.

The politico-economic systems of 'the East' are now in such a state of turmoil that it is not clear what model they now represent, or to what model they are heading, although it seems quite clear that there is no going back exactly to the old model. Therefore, nothing more needs to be said about it here. In any case, after the experience of Grenada, many of us in the English-speaking Caribbean would have a hard time convincing ourselves that there is anything to be gained from trying

now to take that route. The Cubans, on the other hand, did take it and are still trying to cope with its manifold problems.

So far as Jamaica is concerned, now that the old ideologies are breaking down on both sides, we should be in a better position to evaluate the available alternatives in a more careful, rational, and systematic way and, in the process, come up with our own model, instead of slavishly copying or imitating one or another of them.

If we do seriously attempt to move forward in this area, and perhaps move more towards the Asian Model (that is evidently an open question at this point), then it seems to me that there are four prime and related issues, among many others, that will have to be faced. One is the question of the most efficient scale and intersectoral reach of each Group, including in this the role and extent of participation by foreign firms in so-called joint ventures. Two is the need for an explicit system of rules and regulations, properly enforced, that will ensure competition in the sense of freedom of entry. Three, is the question of what is the role of the trade unions, since it is clear from our history and present-day institutions that they must have a role. Four, is the question of what is the specific role for the state in the Group and in mediating among Groups and trade unions, recognising fully and honestly that the state does have a necessary and indispensable role to play.

In other words, we have to open for systematic examination the whole question of what is usually called in popular discussion, 'industrial policy' or, in the textbooks 'industrial organization'. We might better call it, given the way the question is posed in this paper, a question of the model of entrepreneurship. Unfortunately, not enough of this sort of analysis is being done here right now among both our social scientists and policy makers, and in this respect we are far behind others in the game. Perhaps this is because we are still, in one degree or another, caught up in debating the mistaken ideologies of the past which supposed, on the one hand, that the state could substitute for the private sector, and, on the other, that the private sector could do without the state.

### **Converting the Economic Process from Inertia to Cumulative Growth**

Knowing what are the necessary elements to be put in place in order to improve the performance of the economy does not mean that we are home free. There are many other difficulties that still must be faced

if it is decided to go forward with the changeover to a new mode of operation. In general terms, the problem to be faced is one of transition; that is, the adjustment process involved in converting the economy from one with built-in inertia to one of cumulative growth.

It helps to be able to anticipate what the difficulties are and to think how we might best deal with them. Honesty requires, however, that it be recognized from the start that the transition will be rough. For dealing with the difficulties, I have no blueprint to offer (who does?). But here is a short list, with suggestions, of some of the things that we have to think seriously about and open for discussion.

### **The Problem of Initial Conditions**

We have to start from where we are at any given time, and the reality that we start with may be very different from the ideal world of the model. That reality imposes constraints on what we can do to begin to make the changes necessary to get where we want to go.

Then, we have to be pragmatic: work with what we have and build on this, but with a definite goal and purpose in view. We can also seek to find ways of relieving some of the constraints. Debt relief is an obvious candidate. Another is, bargaining as hard as we can for better loan terms and more loans, provided that the loans are put to productive uses so that they can be paid back. For that provision to be met, we have to monitor ourselves carefully to ensure that the people responsible for spending the money don't blow it away again in another consumption binge.

### **The Contemporary World Economic Environment**

The contemporary world environment may be very unfavourable at the time when we begin to move. In fact, we could not be starting at a worse time than the present. The 'engine of growth' has slowed down in the world as a whole. Protectionism and the formation of trade blocs are getting in the way to prevent the international transmission mechanism from spreading around the benefits of growth. There are many other countries at our own level 20 years ago that have already succeeded in moving far ahead of us, and we now have to compete with them in all areas. Countries that were out of the race before (the countries of 'the East') have now, all of a sudden, entered the race and so intensified the competition among all the participants. The technological requirements of competition are now very much different from



what they used to be when we were successful as 'hewers of wood and drawers of water'. Investment capital is becoming more scarce. And there is more, but I need not go on.

We have no alternative but to stay in the race and try as hard as we can at least to keep up with the rest while aiming to catch up and even to get ahead. We also have to strengthen existing alliances that will help us to deal with the competition, while being courageous enough to opt out or act independently of those alliances that are holding us back. And we have to seek to build new alliances wherever there is an opportunity for mutual benefit, in the north, south, east, and west.

### The Costs of Adjustment

It is inevitable that there will be costs (the no-free-lunch principle). But if we learn from the mistakes of the past and the correct strategy is pursued this time around, the payoff may make it worthwhile to incur the costs. The real problem is the distribution of the costs among all concerned, in both present and future generations. Among the present generation nobody wants to lose, and the losers can become upset enough to seek to put a halt to the process. Future generations have no voice so they tend to be ignored.

To get it all to work, given the inherent distributional conflict, there has to be a 'workable truce' between the different groups and a 'social pact' that allows for a fair distribution of the costs and benefits. This is not an easy thing to work out in a contentious parliamentary democracy such as we have, which differentiates us very much from many of the other 'successful' models that we see around us. It takes strong and wise leadership and a willingness on the part of all to try to find a pact that all can agree on. However, there is no guarantee of being able to get agreement or that any agreement, once reached, will hold for long. This may be a constant source of instability along the way.

### The Environmental Consequences

Like future generations, the environment has no voice. But the costs that it bears may wreak havoc on both present and future generations. It is inherently difficult to measure those costs. But we have to find a way to pay back the environment. We have to remember also that 'the people' are part of 'the environment' and not get trapped into

thinking that we can save the environment without saving the people. And, if the people are able to get together to speak for themselves and the environment, then we would have made some headway in dealing with this problem.

### Conclusion

The twenty-first century is almost upon us, and we still have a far way to go in order to start it off on a good footing. We have an even farther way to go, once we start it off, to be able simply to cope with what lies ahead and keep our footing.

But all is not lost. The past we always have with us as our history. The present consists of the tentative steps that we take into a dark unknown. Perhaps we can better negotiate those steps if we have some pointers from our history to hang on to so as not to fall off into the abyss or back to where we started.

The main point of this paper is to suggest that we should learn from our history. If, in addition, we keep our eyes, our ears, and our minds open to learn from others around us near and far, we will be able to make much headway in terms of economic growth. As to whether we make progress in so doing, I leave that question to the philosophers.

### References

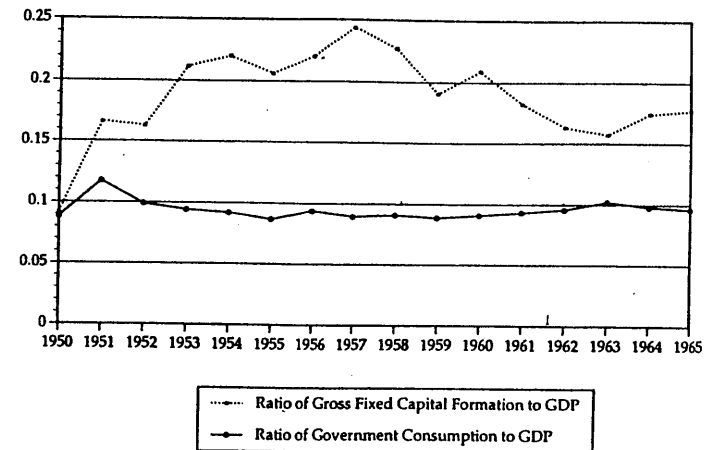
- Amsden, A., *Asia's Next Giant. South Korea and Late Industrialization*, New York: Oxford University Press, 1989.
- Chandler, A. D., 'Organizational Capabilities and the Economic History of the Industrial Enterprise,' *Journal of Economic Perspectives*, 6, Summer 1992, 79-100.
- Danielson, A., 'Surplus and Stagnation in Jamaica: Further Notes,' *Social and Economic Studies*, 41, March 1992, 45-66.
- Eisner, G., *Jamaica, 1830-1930*, Manchester: The University Press, 1961.
- Gereffi, G and Wyman, D. L., eds., *Manufacturing Miracles: Paths of Industrialization in Latin America and East Asia*, Princeton: Princeton University Press, 1990.
- Harris, D. J., 'Capital Accumulation and Resource Allocation in an Import-Constrained Economy: A Framework for Analysis of Recent Experience and Current Trends in the Jamaican Economy,' presented to National Symposium on the Jamaican Economy, PIOJ, Kingston, June 25-26, 1990.
- Harris, D. J., 'Saving and Foreign Trade as Constraints in Economic Growth: A Study of Jamaica,' *Social and Economic Studies*, 19, 2, June 1970, 147-77.
- Jefferson, O., *The Post-War Economic Development of Jamaica*, Jamaica: ISER, 1972.
- Kornai, J., *The Socialist System*, Princeton: Princeton University Press, 1992.

- Nelson, R. R., 'Why Firms Differ, and How Does It Matter?' *Strategic Management Journal*, 12, Winter 1991, 61-74.
- Thorne, A. P., 'Size, Structure and Growth of the Economy of Jamaica,' *Social and Economic Studies*, 4, 4, Supplement, 1955.
- Wade, R., *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*, Princeton: Princeton University Press, 1990.
- Williamson, O. E., *The Economic Institutions of Capitalism: Firms, Markets, and Relational Contracting*, New York: Free Press, 1985.
- Yusuf, S. and R. K. Peters, 'Capital Accumulation and Economic Growth, the Korean Paradigm,' *World Bank Staff Working Papers*, No. 712, 1985.

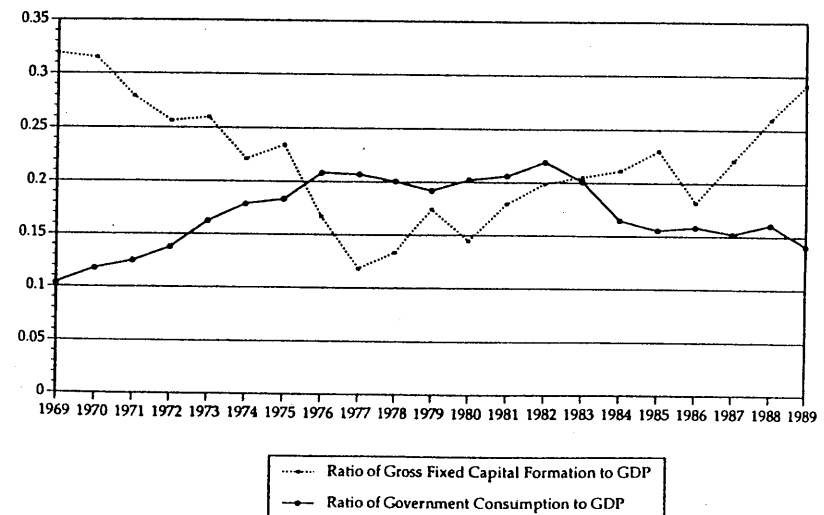
## Notes

- For studies of the overall economic record up to 1969, the best references are Thorne (1955), Eisner (1961), and Jefferson (1972).
- In Harris (1970), the projections ended in 1975, ten years from the base period. This was by design, and conservative in relation to other modellers who seek courageously to project for up to fifty years or even more! But this conservatism paid off because of the subsequent turnaround in the economy that we now know started around 1973-4. As I can now rigorously document (part of the documentation is presented here), there was a sharp structural break that came into play afterwards which the econometric model of the earlier period obviously could not have captured because its parameter estimates were based on the economic structure prevailing in the expansion phase. The art of economic modelling, as the practitioners know very well, is an iterative process of learning after the fact.
- For a detailed accounting on this issue, see for instance Danielson (1992).
- On this, see Harris (1990, p. 16). The reasoning is straightforward. Today's consumption must be financed by reducing saving from current income, by dissaving (i.e. consuming some capital assets) or, by borrowing (which is a claim on future income). Every dollar taken from saving or capital assets yields just one extra dollar of present consumption but reduces future income and consumption by a much greater amount, perhaps two or three times, depending on the size of the capital-output ratio. Insofar as today's consumption is financed by external borrowing, the buildup of foreign debt increases future liabilities for debt service and, unless the debt is used productively so as to increase future capacity to pay, payments for debt service must be met by reducing future consumption.
- See, for instance, Amsden (1989), Yusuf & Peters (1985).
- On this, see Kornai (1992).
- I am referring here to works such as Williamson (1985), Nelson (1991), and Chandler (1992), among others.

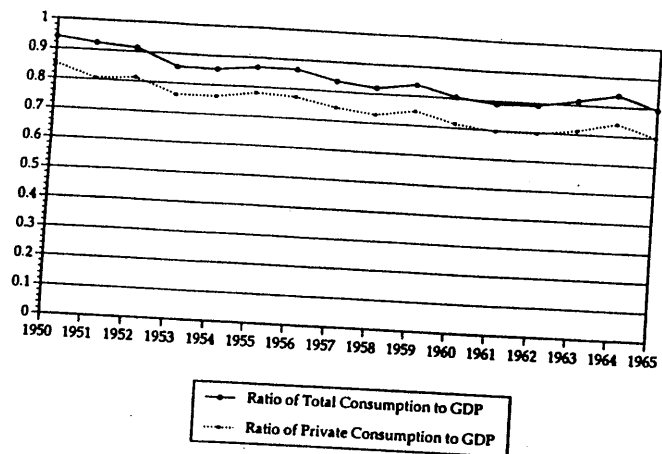
Graph 1. Ratios of Government Consumption to GDP and Gross Fixed Capital Formation to GDP, 1950-1965



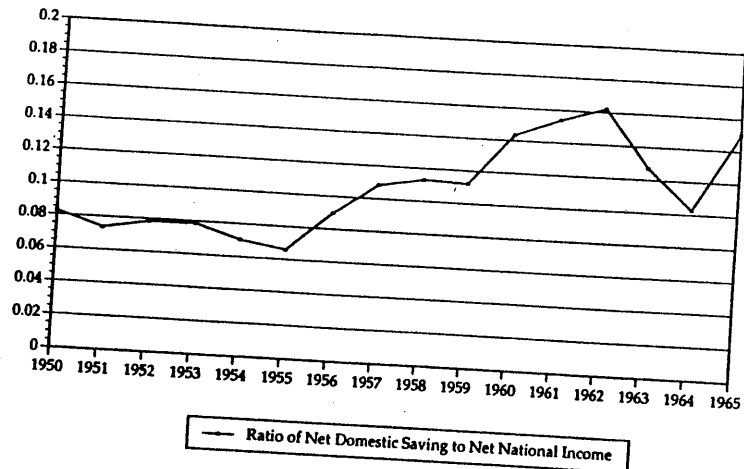
Graph 2. Ratios of Government Consumption to GDP and Gross Fixed Capital Formation to GDP, 1969-1989



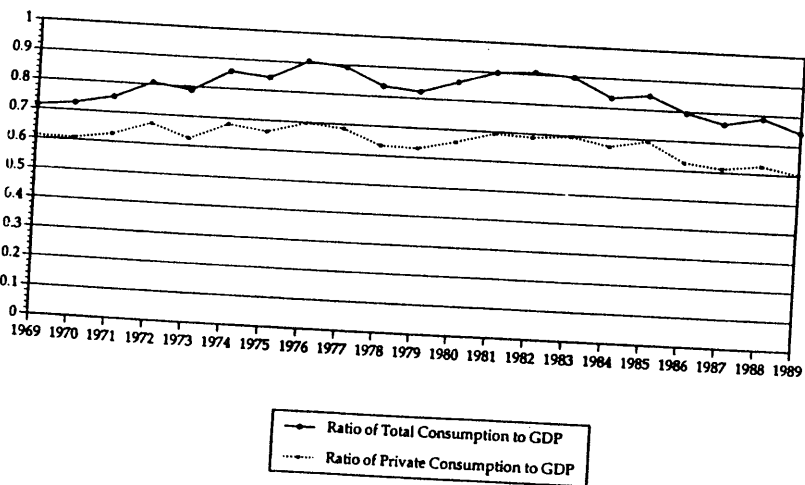
Graph 3. Ratios of Total Consumption to GDP and Private Consumption to GDP, 1950-1965



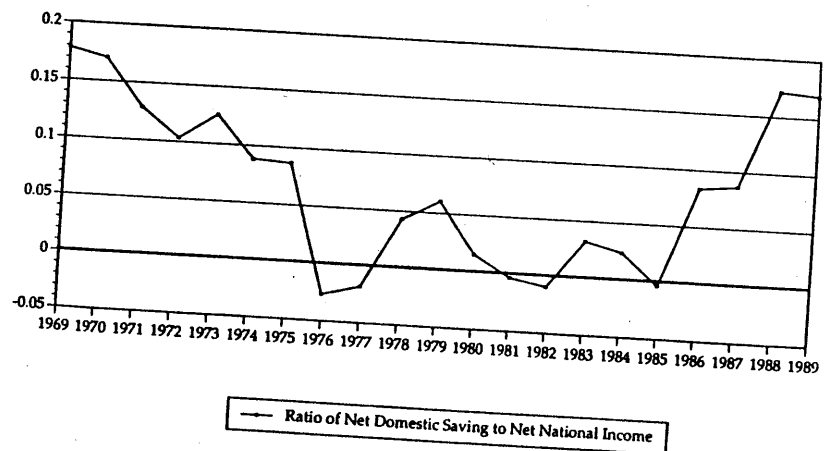
Graph 5. Ratio of Net Domestic Saving to Net National Income, 1950-1965

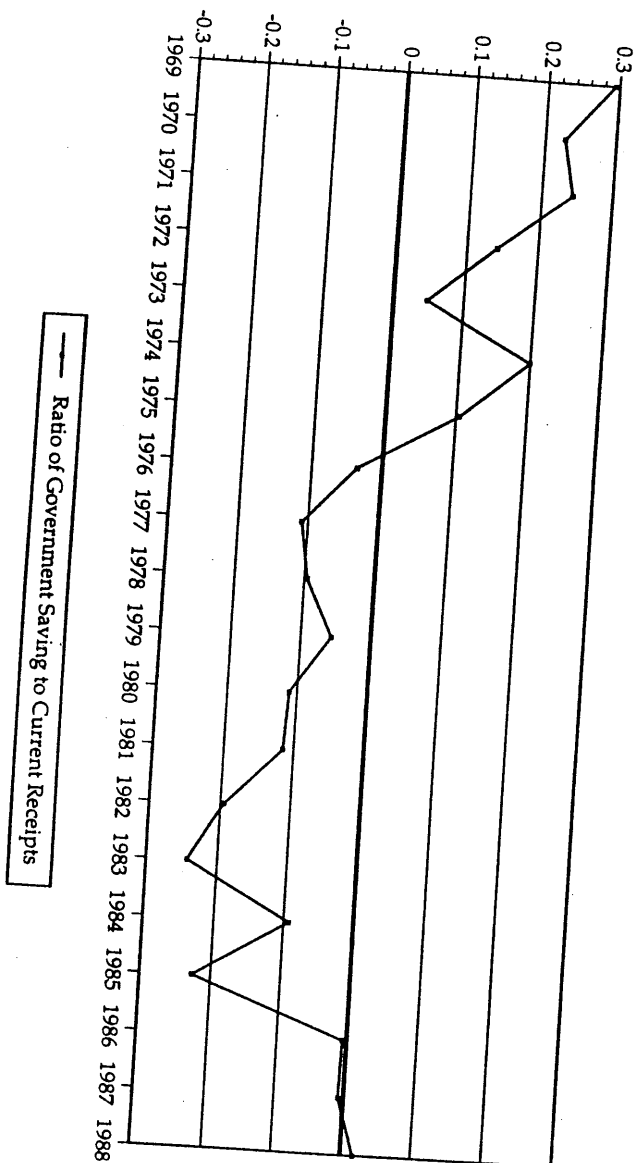


Graph 4. Ratios of Total Consumption to GDP and Private Consumption to GDP, 1969-1989



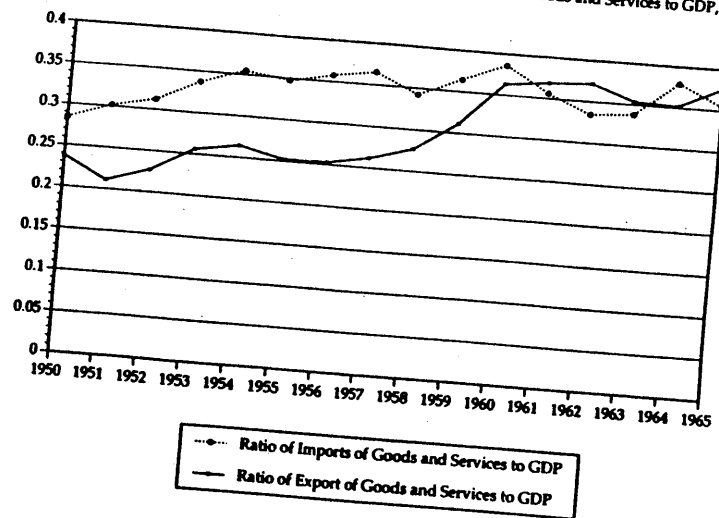
Graph 6. Ratio of Net Domestic Saving to Net National Income, 1969-1989



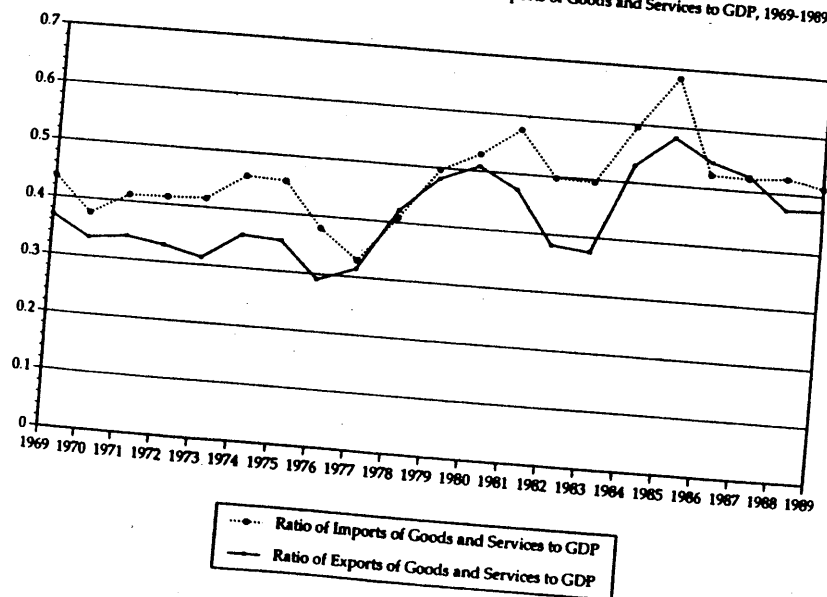


Graph 7. Ratio of Government Saving to Current Receipts, 1969-1988

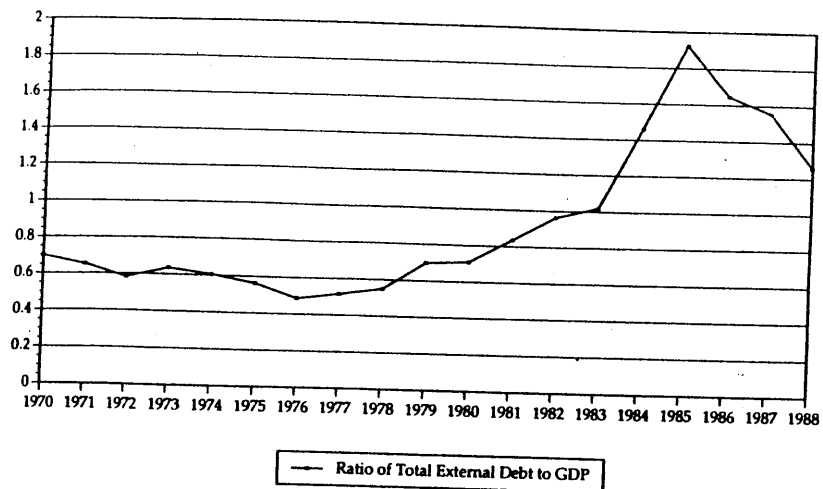
Graph 8. Ratios of Exports of Goods and Services to GDP and Imports of Goods and Services to GDP, 1950-1965



Graph 9. Ratios of Exports of Goods and Services to GDP and Imports of Goods and Services to GDP, 1969-1989



Graph 10. Ratio of Total External Debt to GDP, 1970-1988



Graph 11. Ratio of Debt Service Payments to Exports of Goods and Services, 1970-1988

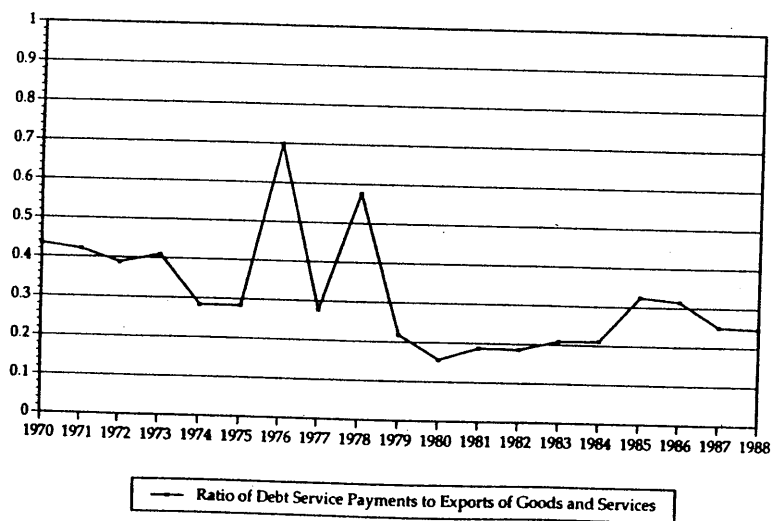


Table 1  
SHARES AND GROWTH RATES OF GDP COMPONENTS  
(at Constant Prices)  
1950-1965, 1969-1989

GDP COMPONENTS	1950 - 1965		1969 - 1989	
	SHARES % (mean)	GROWTH RATES %	SHARES % (mean)	GROWTH RATES %
Final Consumption	85	5.5	82.3	-0.04
Government	10	6.4	17.0	0.82
Private	75	5.4	65.3	-0.22
Total Capital Formation	20	7.4	23.7	-1.45
Gross Fixed Capital	19	7.3	21.9	-1.16
Increase in Stocks	1		1.8	-4.86
Exports of Goods & Services	22*	9.3*	41.8	2.39
Imports of Goods & Services	30*	6.3*	47.8	1.69
GDP	100.0	6.5	100.0	-0.26

\*Excludes Services

Table 2  
SAVING PROPENSITIES  
1950-1965, 1969-1988

SAVING SECTORS	1950 - 1965	1969 - 1988	
	Average Propensity	Average Propensity	Marginal Propensity
National	0.11	0.07	0.34
Non-Financial Enterprises		0.35	0.98
Financial Institutions		0.09	-0.06
Households & Unincorporated Business		-0.04	0.51
Government		-0.10	-0.28

Table 3

COMPOSITION OF GROSS SAVING  
1950-1965, 1969-1989

SAVING COMPONENTS	1950 - 1965	1969 - 1989
	MEAN %	MEAN %
Net Saving	46.2	23.6
Consumption of Fixed Capital	35.7	41.2
Net Capital Transfers from Abroad		2.3
Net Borrowing from Abroad	18.1	32.9

Table 4

SHARES AND GROWTH RATES OF PRODUCTION SECTORS  
(at Constant Prices)  
1950-1965, 1969-1989

PRODUCTION SECTORS	1950 - 1965		1969 - 1989	
	SHARE OF GDP %	GROWTH RATES %	SHARE OF GDP %	GROWTH RATES %
Agricultural Sector	17.5	0.5	7.9	0.49
Industrial Sector	30.2		33.1	-1.81
Mining & Quarrying	5.1	14.7	6.9	-1.76
Manufacture	13.4	6.3	16.9	-0.98
Construction	10.7	5.8	8.1	-4.21
Electricity & Water	1.0	11.2	1.2	3.32
Service Sector	51.4		63.5	0.53
Distribution	16.6	4.1	18.4	-1.42
Transportation	7.3	6.6	6.8	1.83
Finance & Insurance		6.4	5.4	2.22
Imputed Bank Charges			3.7	5.53
Real Estate & Business	4.0	2.3	11.1	1.48
Government	6.7	6.5	15.1	3.43
Household & Non-Profit			1.3	-2.44
Miscellaneous			5.4	0.04
GDP	100.0	5.3	100.0	-0.26

Table 5

GROWTH RATES OF PRODUCTION SECTORS BY SUB-PERIODS  
(at Constant Prices)

1969 - 1989

PRODUCTION SECTORS	1969-1973	1974-1980	1981-1985	1986-1989	1969-1989
Agricultural Sector	3.42	0.50	2.59	-1.90	0.49
Industrial Sector	5.21	-5.88	-1.72	7.53	-1.81
Mining & Quarrying	11.64	-1.82	-10.83	9.16	-1.76
Manufacture	5.35	-5.47	0.82	4.35	-0.98
Construction	0.61	-12.04	0.96	14.68	-4.21
Electricity & Water	10.05	0.70	3.75	4.30	3.32
Service Sector	6.92	-1.05	0.01	2.47	0.53
Distribution	5.77	-5.60	-1.21	-0.75	-1.42
Transportation	5.91	-2.01	2.97	3.70	1.83
Finance & Insurance	10.30	1.00	2.12	1.98	2.22
Imputed Bank Charges	4.30	4.32	-4.16	14.97	5.53
Real Estate & Business	3.99	0.65	0.45	3.64	1.48
Government	11.60	6.20	-1.86	0.42	3.43
Household & Non-Profit	12.93	-11.90	2.79	1.15	-2.44
Miscellaneous	7.58	-3.94	3.08	2.50	0.04
GDP	6.03	-2.59	0.25	3.71	-0.26

Table 6

## GROWTH RATES OF PRODUCTION SUB-SECTORS BY SUB-PERIODS

1970 - 1989

	1970-1973	1974-1980	1981-1985	1986-1989
TOTAL AGRICULTURE	2.95	0.73	1.64	-1.65
Export Agriculture	-3.90	-4.09	-0.68	0.90
Sugar	-2.28	-3.33	-3.76	1.50
Other Exports	-5.97	-2.72	4.94	1.90
Domestic Agriculture	12.24	2.48	2.90	-5.50
TOTAL MANUFACTURE	5.23	-4.84	1.30	4.43
Food (excl. Sugar)	3.40	-4.04	3.59	4.50
Sugar, Molasses & Rum	-3.37	-3.87	0.06	-0.25
Alcoholic Beverages	11.05	2.60	-2.92	
Non-Alcoholic Beverages	4.43	-2.40	-2.01	
Tobacco & Tobacco Products	6.60	1.49	0.48	-0.60
Textiles & Wearing Apparel	3.58	-8.90	5.48	13.55
Leather & Leather Products	-17.15	26.00	14.86	
Footwear	-2.34	-9.03	0.98	
Wood, Wood & Cork	2.28	1.74	1.12	
Furniture & Fixtures	15.25	-15.30	7.28	
Paper & Printing	11.05	-4.08	0.18	
Petroleum Refining	3.48	-5.47	5.14	1.70
Rubber & Plastic Products	13.01	-6.09	4.22	
Non-Metallic Products	1.40	-11.24	11.27	
Machinery & Equipment	5.11	-10.16	2.64	
Other Manufacturing Industries	-0.30	-6.36	7.40	
TOTAL MISCELLANEOUS SERVICES	7.75	-4.57	3.12	3.83
Hotels, Restaurants, Clubs	5.18	-3.50	5.76	4.95